DETAILED ACTION

Claim Objections

Claim 10 is objected to because of the following informalities: In line 5, "an operating states" should be changed (i.e. remove "an" or change 'states' to state'). Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Uber, III et al (US Pub 2002/0165445 –cited by applicant).

Re claims 1, 2, 8-10, 16-19: Uber, III et al disclose a system and method for data exchange between a CT imaging device and an injector 40 [paragraph 0039, 0048] wherein the data exchange is mutual relating to their respective operating states via a data interface 90 (figure 1). The exchange between the devices is standardized and may be unidirectional or bidirectional and a malfunction occurring during operation is transmitted [0018], whereby a decision is made automatically using a termination rule as to whether the operation of the imager or the injector is expedient [0018, 0019, 0065]. Such is used as a basis to control the operation of either the imager or the

injector. Consequently, the malfunction may be an operating parameter and a termination rule is defined by the logic of the control parameter or specific data protocol [0065].

Re claim 3, 4, 20, 21: An operational readiness may be checked before starting to operate, wherein operation is suppressed if the other is not ready (i.e. start/stop/hold/reset/preparation commands) [0065].

Re claim 5, 11-13: The decision parameters may be input manually [0065].

Re claims 6, 7, 14, 15: The operational data is entered and displayed at an operator interface 150 which is a common operating console [0063].

Response to Arguments

Applicant's arguments filed 6/30/11 have been fully considered but they are not persuasive. Applicant argues that Uber, III et al do not disclose automatic determination of whether to terminate operation of the CT or injector based on an injected quantity of contrast agent at the time of the malfunction, wherein the malfunction is caused by failure of the injector. However, the examiner disagrees. Uber, III et al disclose automatic determination whether to terminate the CT or the injector, as a hold state is entered by the operator or a system component (i.e. automatic determination) to temporarily suspend the injection [0062]. Various operating parameters are provided including information regarding the quantity injected (total injected volume). This information is transmitted between the CT and the injector [0065] and if this information is sufficient, there may not be a hold state entered. However, if the information is

insufficient, then a hold state may be entered. Therefore, there is an automatic determination whether to terminate is based on injected volume. Furthermore, the determination of whether to terminate operation of the CT or injector may be done at the time of a failure of the injector, wherein the failure may be included in an error code, diagnostic information, machine state, or a control parameter (i.e. stop injection, stop scan) [0065]. In another instance, interface 90 can also be used to terminate an injection if a certain level of enhancement has not been reached within a certain time period to prevent wasting of the contrast agent [0073]. Since the termination is based on enhancement level and enhancement is based on the amount of contrast agent injected, then the termination is also based on the injected amount. This automatic determination of terminating is also done at the time of a malfunction, which may be considered to be included in the injection communication and control information [0073].

The previous objections to the claims and drawings and the 112 rejections are now withdrawn due to amendments and/or applicant's response.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. ROZANSKI whose telephone number is (571)272-1648. The examiner can normally be reached on Monday - Friday, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL T ROZANSKI/

Primary Examiner, Art Unit 3768